

# Underground Storage Tank Regulatory Compliance Division S.C. Department of Health and Environmental Control 2600 Bull Street, Columbia, S.C. 29201

Telephone: (803)-896-7957 Fax: (803) 896-6245 www.scdhec.gov/ust

# APPLICATION FOR PERMIT TO OPERATE

I. REGISTI	RATION	I AND SITE	E INFORMAT	ΓΙΟΝ			
Facility Name				SCDHEC F	Permit Identificati	on Number	
Physical Street Address City		County		Facility T	Facility Telephone Number		
II. TANK INFORMATION							
Tank Number (list each compartment separately)		1	2	3	4	5	
Capacity (gallons)							
Construction Material (check one): Steel w/anode							
Fiberglass-Reinforced Plastic (FRI	2)						
Steel-FRP Compos	ite						
Steel-Polyuretha	ne						
Other (speci	(y)						
Serial Number of Tank	(s)						
Is the tank information provided identical to the information submitted on the Application for the Permit to Install? Yes [ ] No [ ]  If no, were all changes to the Permit to Install submitted in writing? Yes [ ] No [ ]  Tank Manufacturer:							
III. TANK	INSTA	LLATION	INFORMATION	ON			
				<u>YES</u>	NO	N/A	
<b>Backfill:</b> This should be a clean, washed, well-granulated, free-flowir should be no larger than ¾ inch and free of debris, rock or other.			material such	as sand, crushed r	ock, or pea grav	/el. The particles	
Does the backfill used meet the definition described above?				[ ]	[ ]	[ ]	

## III. TANK INSTALLATION INFORMATION (CONTINUED) YES NO N/A Backfill continued: Type of backfill used: Sand [ ] Gravel [ ] Crushed Rock [ ] Other [ ] Amount of backfill under tanks (Minimum of 12 inches required): \_\_\_\_\_\_ Was backfill tamped under lower quadrant of tanks to fill any potential voids? [ ] [ ] [ ] If sand backfill was used, was it compacted to ensure adequate support of tank and prevent settlement? If yes, please indicate the method of compaction that was used: Sand-Slurry Method [ ] Mechanical [ ] Other(specify): \_\_\_\_\_ Are tanks located out of a traffic area? [ ] [ ] [ ] If yes, please complete the following information: At least 2 feet of compacted backfill or [ ] [ ] At least 1 foot of compacted backfill plus 4 inches of reinforced concrete [ ] If concrete was used, does slab extend one (I) foot beyond tank outline? Are tanks located in a traffic area? [ ] [ ] If yes, please complete the following information: At least 2.5 feet of compacted backfill and 6 inches of asphalt paving At least 1.5 feet of compacted backfill and 8 inches of reinforced concrete Does concrete or asphalt slab extend one (1) foot beyond tank outline? [ ] [ ] Excavation Dimensions: Please indicate the horizontal clearance for the following: Excavation walls: Other tanks: (Please note that a minimum horizontal clearance of 12 inches is required for steel and composite tanks or a minimum of 18 inches for fiberglass tanks.) Does the distance from the top of the tank to final grade exceed tank diameter for steel or composite tanks? [ ] Does the distance from the top of the tank to final grade exceed 7 feet for fiberglass tanks? [ ] Anchorina System: Was water encountered during installation? [ ] [ ] [ ] Was an anchoring system used? If yes, please indicate the system that was used: \_\_\_\_\_ If steel tanks were used, were the tanks electrically isolated from the anchor straps? [ ] Were anchor straps dielectrically coated and cathodically protected? [ ] [ ] [ ] Cathodic Protection (Please complete this section only if steel or steel composite tanks were installed)

If steel tanks were used, were the tanks electrically isolated from the anchor straps?

Were anchor straps dielectrically coated and cathodically protected?

[ ] [ ]

Cathodic Protection (Please complete this section only if steel or steel composite tanks were installed)

Please indicate the type of cathodic protection used: Sacrificial Anode [ ] Impressed Current [ ]

If sacrificial anodes were used, was the protective cover removed?

[ ] [ ] [ ]

Please indicate the location of the test wire:

Was electrical isolation verified after the piping was connected?

[ ] [ ] [ ]

# IV. PIPING INFORMATION 1 3 Tank Number (list each compartment separately) Material of Construction (check one): Fiberglass-Reinforced Plastic (FRP) Flexible Other (Specify) Please note that all metal components of piping systems (flex connectors, swing joints, check valves, etc.) that are in contact with backfill (not housed in acceptable secondary containment such as sumps, boots, or jackets) must be cathodically protected. Please indicate how metal components of the piping system were protected from corrosion: Is the piping information identical to the information submitted on the Application for the Permit to Install? Yes [ ] No [ ] If no, were all changes to the Permit to Install submitted in writing? Piping Manufacturer: V. PIPING INSTALLATION INFORMATION YES NO N/A Backfill: This should be clean, washed, well-granulated, free-flowing noncorrosive inert material such as sand, crushed rock, or pea gravel. The particles should be no larger than ¾ inch and be free of debris, rock, or other organic material. Does the backfill used meet the definition described above? Type of backfill Used: Sand [ ] Crushed Rock [ ] Pea Gravel [ ] Other (Specify): \_\_\_\_\_ Please indicate the amount of backfill used for the following (minimum of 6 inches required): Below all piping: \_\_\_\_\_ Above all piping: \_\_\_\_ On all sides of piping: \_\_\_\_ If sand backfill was used, was it compacted to ensure adequate support of tank and prevent settlement? [ ] If yes, please indicate the method of compaction that was used: Sand-Slurry Method [ ] Mechanical [ ] Other(specify): \_\_\_\_\_ Is piping located out of traffic area? [ ] If yes, please complete the following information: At least 2 feet of compacted backfill or At least one (1) foot of compacted backfill plus 6 inches of reinforced concrete Are tanks located in a traffic area? If yes, please complete the following information: At least 6 inches of compacted backfill and additional backfill plus enough paving to

equal 18 inches of material from the top of the piping to the bottom of the grade?

[ ]

[ ]

V. PIPING INSTALLATION INFORMATION (CONTINU	JED)		
	YES	NO	N/A
Excavation Dimensions: Is all piping separated by at least twice the piping diameter?	[ ]	[ ]	[ ]
Is all piping sloped to at least 1/8 of an inch per foot from dispenser(s) to the tanks(s)?	[ ]	[ ]	[ ]
Does piping pass over tanks at any point?	[ ]	[ ]	[ ]
Are all product lines located in the same trench?	[ ]	[ ]	[ ]
Are all vent lines located in the same trench?	[ ]	[ ]	[ ]
Pumping System: Please indicate type of pumping system that was installed: Pressurized [ ] Suction [ ] Pressurized	ed/Suction Combir	nation [ ]	
For pressurized systems, was an appropriate leak detection method installed and operational?	[ ]	[ ]	[ ]
For suction systems, please indicate type of check valve used: Foot [ ] Angled [ ] Vertical [ ]			
<b>Testing:</b> Piping tested for at least one hour at 45 psi and soaped to check for leaks?	[ ]	[ ]	[ ]
If fiberglass piping was used, was entire length of piping soaped?	[ ]	[ ]	[ ]
Were any necessary repairs made prior to backfilling?	[ ]	[ ]	[ ]
VI. SECONDARY CONTAINMENT			
Tanks (check all that apply): Single Wall [ ] Double Wall [ ] External Impermeable Liner [ ] Other (specify): _			
Piping (check all that apply): Single Wall [ ] Double Wall [ ] Triple Wall [ ] External Impermeable Liner [ ]	Other (specify):		
VII. SPILL AND OVERFILL PREVENTION EQUIPME	ENT		
Cnill Dravantian	YES	NO	N/A
Spill Prevention: Was the equipment properly installed?	[ ]	[ ]	[ ]
Manufacturer: Model: Capacity:			
Surface mounded to channel water away from the spill prevention equipment?	[ ]	[ ]	[ ]
Overfill Prevention Equipment: Was the equipment properly installed?	[ ]	[ ]	[ ]
Please indicate prevention method used: Ball float vent valve [ ] Drop tube shut off [ ] Alarm [	] Other (specif	- Ty):	
Manufacturer: Model:			
If a ball float vent valve or alarm were used, were drop tubes installed?	[ ]	[ ]	[ ]
Do drop tubes extend to within 6 inches of the bottom of the tank?	[ ]	[ ]	[ ]

# VIII. RELEASE DETECTION

Release Detection (check all that apply):	Tanks	Pip	ing	
Manual Tank Gauging				
Inventory Control with Tank Tightness Testing				
Statistical Inventory Reconciliation (SIR) SIR Provider:				
Automatic Tank Gauging  Manufacturer: Model:				
Vapor Monitoring*				
Groundwater Monitoring **				
Interstitial Monitoring within Secondary Barrier/Containment  Manufacturer: Model:				
Line Leak Detectors  Manufacturer: Model:  Electronic [ ] Mechanical [ ] Stand Alone [ ]				
Annual Line Tightness Testing (pressurized piping only)				
*If Vapor Monitoring is the chosen method of release detection, please		-		NI/A
Is well screen at least 2 inches in diameter with 0.20 inch factory perforated slots?	<u>YE</u> [	. <u>S</u>	<u>NO</u> ]	N/A [ ]
Is depth at least 2 feet below the bottom of the tanks?	[	] [	]	
Is it grouted above the screen with a neat cement to prevent infiltration of surface contamina	ition? [	1 [		[ ]
		J [	]	[ ]
Is the upper 12 inches of the well cased?	]	] [	]	[ ]
	]		] ] ]	[ ] [ ] [ ]
Is the well equipped with a locking device?		] [		[ ] [ ] [ ]
Is the well equipped with a locking device?  Is the well clearly marked as a "Monitoring Well" with a black triangle on a white backgrour		] [	]	[ ] [ ] [ ] [ ]
Is the well equipped with a locking device?  Is the well clearly marked as a "Monitoring Well" with a black triangle on a white backgrour	nd? [	] [	] ] ]	[ ] [ ] [ ] [ ] [ ] [ ] ion:
Is the well equipped with a locking device?  Is the well clearly marked as a "Monitoring Well" with a black triangle on a white backgrour  Is the surface mounded to channel water away from the well?	nd? [	] [ ] [ ] [ the following	] ] ]	[ ] [ ] [ ] [ ] [ ] ion:
Is the well equipped with a locking device?  Is the well clearly marked as a "Monitoring Well" with a black triangle on a white backgrour  Is the surface mounded to channel water away from the well?  **If Ground water Monitoring is the chosen method of release detection.	nd? [ [ n, please provide t	] [ ] [ ] the following	] ] ] g informati	[ ] [ ] [ ] [ ] [ ] ion:
Is the well clearly marked as a "Monitoring Well" with a black triangle on a white backgrour Is the surface mounded to channel water away from the well?  ***If Ground water Monitoring is the chosen method of release detection.  Does the well meet all standards listed above for vapor monitoring?	nd? [ [ n, please provide i	] [ ] [ ] the following ] [	] ] ] g informati	[ ] [ ] [ ] [ ] [ ]

IX. WATER SUPPLY WELLS							
				YES	NO	N/A	
			ing community water systems or potable drinking water wells within 1,000 feet of nks, piping, dispensers) of the system?	[ ]	[ ]	[ ]	
lf	If yes, please indicate actual distance in feet:						
Are there any navigable waters, coastal zone critical areas, or wells (other than what is mentioned above) [ ] within 100 feet of any component (tanks, piping, dispensers) of the system?					[ ]		
lf	f ye	s, ple	ease indicate actual distance in feet:				
			X. INSTALLATION				
testing laboratestur	ora rer's	tory s inst	nust be properly installed in accordance with a code of practice developed by a nation and in accordance with the manufacturer's instructions [SCUSTCR R.61-92, Part 2 ructions are not in agreement concerning an installation standard, then the more environment which standard(s) was used to oversee the tank system installation (standard(s)) was used to oversee the tank system installation (standard(s)).	(80.20(e)]. If a nentally-protective	code of practic of the two must	e and the	
	[	1	American Petroleum Institute Publication 1615, "Installation of Petroleum Storage System		11 37		
	Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems."					è	
	[ ] American National Standards Institute Standard B31.3, "Petroleum Refinery Piping."						
	[ ] American National Standards Institute Standard B31.4, "Liquid Petroleum Transportation Piping System."						
with the sta	anda	ard th	tors must ensure that one or more of the following methods of certification, testing, or insponat was chosen.		o demonstrate co	ompliance	
Please ir	ndi	cate	e which method(s) were used to meet this requirement (check all that a	apply):			
	[	]	The installer is certified by tank and piping manufacturers.				
	[	]	The installation has been inspected and certified by a South Carolina registered profession UST system installation (attach report).	onal engineer with	education and e	experience	
	[	]	The correct notification requirements have been followed and the installation has been in of the UST program.	spected and appro	oved by a repres	sentative	
	[	]	All work listed in the manufacturer's installation checklists has been completed.				
	[	]	The owner and operator has complied with another method for ensuring compliance with the UST program to be no less protective of human health and the environment.	this section that h	as been determ	ined by	
			If this method was chosen, please specify method used:				

XI. SUPPLEMENTAL INFORMATION								
	YES	NO	N/A					
Tank manufacturer's installation checklist attached?	[ ]	[ ]	[ ]					
Piping manufacturer's installation checklist attached?	[ ]	[ ]	[ ]					
Pneumatic or hydrostatic testing results for tanks and piping attached?	[ ]	[ ]	[ ]					
Was testing completed at 90 or 95% capacity, as applicable?	[ ]	[ ]	[ ]					
An as-built map with all components documented and scale indicated attached?	[ ]	[ ]	[ ]					
Was product introduced to ballast the tanks?	[ ]	[ ]	[ ]					
If yes, was the required written notification received by the program prior to the introduction of the product into the tanks?	[ ]	[ ]	[ ]					
If yes, were daily stick readings taken until such time as the chosen method of leak detection was installed and operational?	[ ]	[ ]	[ ]					
Current financial responsibility documentation on file with the UST program?	[ ]	[ ]	[ ]					
Documentation for any special conditions listed on the Permit to Install attached?	[ ]	[ ]	[ ]					
XIII. CERTIFICATION  I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals responsible for obtaining the information and installing the UST system, I believe that the submitted information is true, accurate, and complete. Please note that original signatures must be submitted before the UST Permitting Coordinator will approve an Application for a Permit to Operate.  Name of owner or owner's authorized representative (type or print)  Title								
Signature	Dat	re						
Name of installer (type or print)	Titl	9						
Signature Date								



# **Underground Storage Tank Control Regulations**

# APPLICATION FOR PERMIT TO OPERATE

#### **GENERAL INFORMATION:**

On May 24, 1985, the South Carolina Underground Storage Tank Control Regulations (SCUSTCR) became effective. Revisions to these regulations became effective on March 23, 1997. The regulations provide for the development and implementation of a regulatory program for underground storage tanks (USTs) that store regulated substances. The regulations set forth specific requirements designed to prevent releases from USTs. To ensure that the design, construction, and installation requirements are met, a tank permitting program has been established. Pursuant to SCUSTCR R.61-92, Subpart B, Section 280.20, after January 1, 1986, any person who proposes to install a new tank must apply for a Permit to Install and possess this permit prior to tank installation. A Permit to Install will be issued for UST systems upon Department review and approval of the Application for Permit to Install. An Application for Permit to Operate will be included with the approval for the Permit to Install. The Application for Permit to Operate must be submitted when the installation of the UST system has been completed. Upon Department review and approval of the Application for Permit to Operate, a Permit to Operate will be issued. An invoice for the registration fee, as authorized by the State Underground Petroleum Environmental Response Bank (SUPERB) Act, will be issued at the time that a UST system is ballasted with fuel or at the time the Permit to Operate is a violation of the SCUSTR R.61-92, Subpart B, Section 280.23(b).

## **EXPLANATION AND DEFINITIONS:**

Complete DHEC Form 1959 only if you are proposing to begin the operation of a UST system. Please read the instructions carefully prior to completing the form. If you have any questions regarding this form, please contact the UST Permitting Coordinator at (803) 896-6942.

"New tank" means any tank installed after January 1, 1986.

"Underground storage tank (UST)" means any one or combination of underground enclosed containers (including underground pipes connected thereto) that is 10 percent or more beneath the surface of the ground. Excluded are:

- 1) farm or residential tanks of 1,100 gallons or less in capacity used for storing motor fuel for noncommercial purposes;
- 2) tanks used for storing heating oil for consumptive use on the premises where stored;
- 3) septic tanks:
- 4) pipeline facilities (including gathering lines and those facilities that are intrastate) regulated under the Natural Gas Pipeline Safety Act of 1968, the Hazardous Liquid Pipeline Safety Act of 1979, or under state laws;
- 5) surface impoundments, pits, ponds, or lagoons;
- 6) storm water or waste water collection systems;
- 7) flow-through process tanks;
- 8) liquid traps or associated gathering lines directly related to oil or gas production and gathering operations; and
- 9) storage tanks situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) and if the storage tank is situated upon or above the surface of the floor.

"Regulated substance" means any substance defined in Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C) and petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute). If you do not know whether your tank contains a regulated substance, please call the UST Permitting Coordinator at (803) 896-6942.

## "Owner" means:

- 1) In the case of an underground storage tank in use on November 8, 1984, or brought into use after that date, any person who owns an underground storage tank used for storage, use, or dispensing of regulated substances:
- 2) In the case of any underground storage tank system in use before November 8, 1984, but no longer in use on that date, any person who owned such UST immediately before the discontinuation of its use; or
- 3) A person who has assumed legal ownership of the underground storage tank through the provisions of a contract of sale or other legally binding transfer of ownership.

## INSTRUCTIONS FOR COMPLETING THE APPLICATION FOR PERMIT TO OPERATE:

I. <u>Location of Tank(s)</u> - Enter the name, physical street address where the UST(s) are to be located, facility telephone number, and SCDHEC permit number.

# II. Tank Information -

- a) Indicate in the table the capacity of each tank. List each compartment as a separate tank.
- b) Indicate in the table the construction material and the serial number for each tank.
- c) Indicate if the information provided is the same as the information submitted for the Permit to Install by checking the appropriate box.
- d) Indicate the name of the tank manufacturer in the blank.
- III. <u>Tank Installation Information</u> Indicate the answer to each question by checking the appropriate box or completing the blanks as needed.
  - a) Backfill: Indicate the type and amount of backfill used, the compaction method used, if applicable, and whether tanks were located in or out of potentially high-traffic areas.
  - b) Excavation Dimensions: Indicate the distances and clearances used.
  - c) Anchoring System: Indicate if water was encountered and the type of anchoring system used, if applicable.
  - d) Cathodic Protection: Please complete this section only if steel or steel composite tanks were used. Indicate the type of cathodic protection used and if the correct protocol was used.

# IV. Piping Information -

- a) Indicate in the table the construction material for the piping.
- b) Indicate in the blank how the metal components of the piping system are protected from corrosion.
- c) Indicate if the information provided is the same as the information submitted for the Permit to Install by checking the appropriate box.
- d) Indicate the name of the piping manufacturer in the blank.
- V. <u>Piping Installation Information</u> Indicate the answer to each question by checking the appropriate box or completing the blanks as needed.
  - a) Backfill: Indicate the type and amount of backfill used, the compaction method used, if applicable, and whether the piping was located in or out of potentially high-traffic areas.

- b) Excavation Dimensions: Indicate if the correct distances and slope were used. Indicate if the piping is located in the same trench and if it crosses over the tanks at any point.
- c) Pumping System: Indicate the type of pumping system installed. Indicate that an appropriate leak detection method was installed and operational or the type of check valve installed, as applicable.
- d) Testing: Indicate if the soap test was conducted at 45 pounds per square inch (psi) and if the entire length of the piping, as applicable, was soaped to check for leaks. Indicate if leaks were found and repairs were needed if such repairs were made prior to backfilling.
- VI. <u>Secondary Containment</u> Indicate the method of secondary containment used, if applicable, for tanks and piping by checking the appropriate box.
- VII. <u>Spill and Overfill Prevention Equipment</u> Indicate the answer to each question by checking the appropriate box or completing the blanks as needed.
  - a) Spill Prevention: Indicate if the equipment was properly installed, the name of the manufacturer, the model number and the capacity of the equipment; also, indicate if it was installed in order to keep water from entering.
  - b) Overfill Prevention: Indicate if the equipment was properly installed, the method of installation, the name of the manufacturer, the model number and whether drop tubes were installed to the correct length.
- VIII. <u>Release Detection</u>- Indicate the method of leak detection that was installed for both the tanks and the piping by checking the appropriate box in the table. Complete the blanks for the chosen method of leak detection, as applicable. If vapor or ground water monitoring boxes are checked, then complete the bottom portion of the page.
- IX. <u>Water Supply Wells</u> Please indicate if there are existing community water systems or drinking water wells within 1,000 feet of any portion of the system and provide the *exact* distance in the blank. Please indicate if there are navigable waters, coastal zone critical areas or any other wells within 100 feet of any portion of the system and provide the *exact* distance in the blank.
- X. <u>Installation</u> Indicate the standard that was followed during the installation of the system by checking the appropriate box. Indicate the method of installation that was used to ensure that the standard was correctly followed by checking the appropriate box or boxes.
- XI. <u>Supplemental Information</u> Complete the boxes indicating that the required supplemental information has been included. Also, indicate if the correct procedures were followed to ballast the tank with product and if current financial responsibility is on file with the program.
- XII. <u>Notes or Additional Information</u> Indicate any other information that may be pertinent to issuing the Permit to Operate.
- XIII. <u>Certification</u> The tank owner, or an authorized representative, as well as the installation contractor must sign the application. Only original signatures will be accepted. **The Permitting Coordinator will not approve an Application for a Permit to Operate without original signatures**.

# OFFICE MECHANICS AND FILING:

After completing the form, send the form and all required supplemental documentation to: UST Permitting Coordinator SC Department of Health and Environmental Control 2600 Bull Street Columbia, South Carolina 29201-1708

It is recommended that the UST owner retain a copy of the completed Permit to Operate application. Allow approximately two to four weeks for Department review. Please note that an invoice for the annual tank fees as well as a temporary certificate will be included with the Permit. *Exception*: If tanks were ballasted with product prior to the submittal of the Application for the Permit to Operate, an invoice will have already been sent. All required fees must be paid in order to receive your registration certificate.